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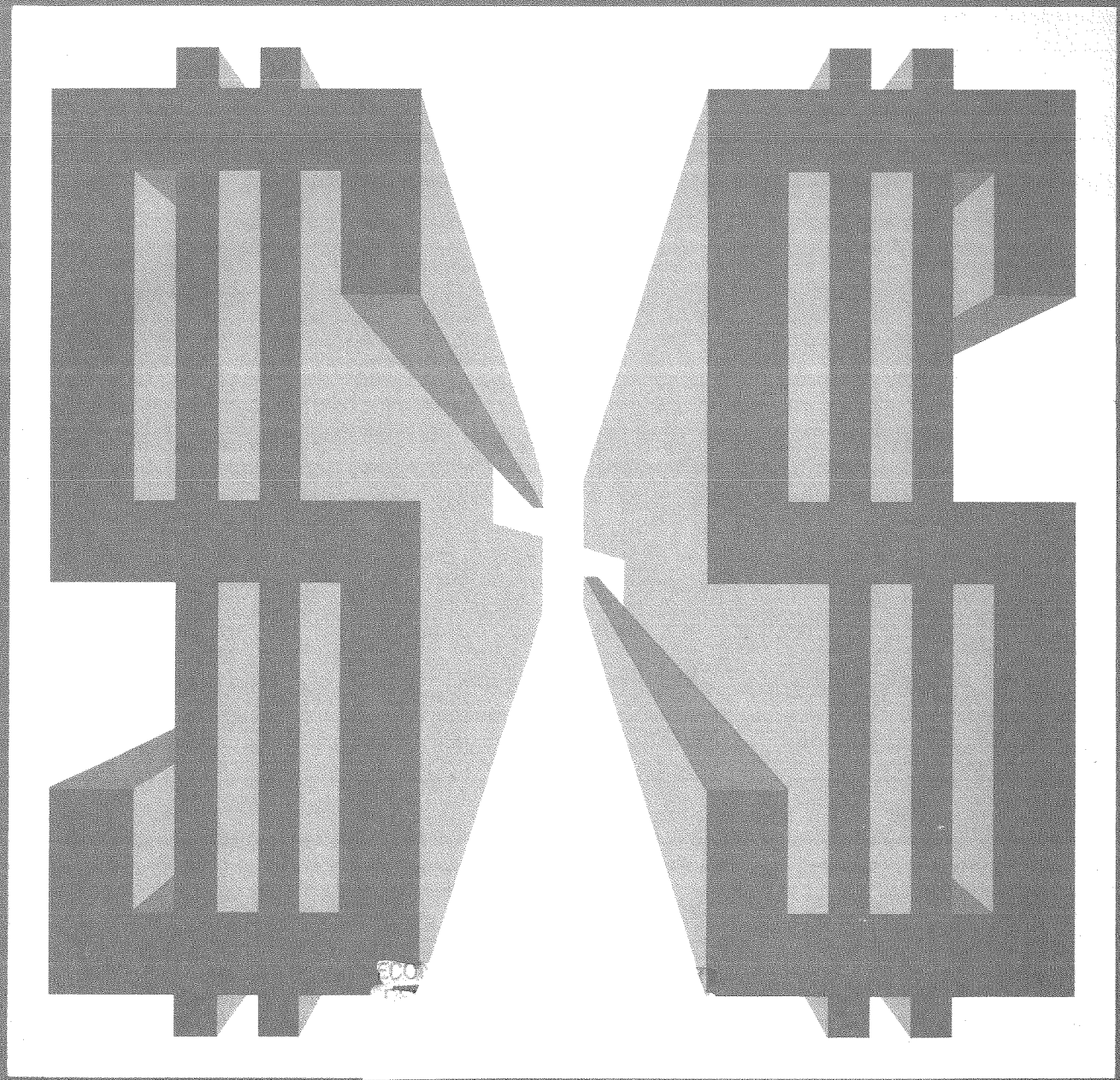

MONETARY POLICY AND INTEREST RATES

Monetary Policy and Interest Rates

October 6, 1979 may represent one of the key dates in the nation's monetary history, along with December 23, 1913 (the passage of the Federal Reserve Act) and March 4, 1951 (the signing of the "Accord" which removed Treasury domination of central-bank policy). On that October day, the Federal Reserve began to improve its monetary control by changing its operating techniques — that is, by controlling the quantity of bank reserves rather than by tightly pegging the cost of those reserves (the Federal-funds rate). The Fed subsequently has been broadly successful in meeting its monetary-control objectives, but its operational shift also has been accompanied by increased volatility in both interest rates and the monetary aggregates. This issue of the **Economic Review** examines these several aspects of post-1979 monetary policy, and also analyzes the response of major economic variables to policy changes.

Paul Evans investigates how much of the recent increase in interest-rate volatility stemmed from the October 1979 change in monetary policy. He finds that this policy change produced only about 30 percent of the increased volatility in long-term interest rates, and that the rest came from sources not directly under Federal Reserve control. "Almost all of this 30 percent resulted from the Fed's adherence to its monetary targets; by itself, the freeing of the funds rate had little to do with the increased rate volatility."

Evans' findings thus indicate that the Federal Reserve has been responsible for only a small part of the increase in interest-rate volatility. Citing a number of national and international political events of the period, he argues, "Clearly, none of these events was a direct consequence of the monetary-policy change. Furthermore, future years may see a return to normalcy, with a sharp reduction in interest-rate volatility."

Continuing, he argues that the Federal Reserve's decision to move the Fed-funds rate more in response to monetary surprises entails more volatility of both long- and short-term interest rates. "It probably also helps the Federal Reserve to hit its targets for money growth and hence for inflation. For this reason, the increased volatility — and the resultant reduction in capital formation and redirection of capital towards shorter-lived assets — may be the price that must be paid to hit these targets."

Turning to the surprisingly high variability of the monetary aggregates in the post-1979 environment, John Judd and John Scadding have developed a monthly money-market model which explains this phenomenon. The model shows how certain types of financial-market disturbances, such as sharp changes in bank loans, can affect the money supply and thus cause problems of monetary control. The evidence indicates that large swings in bank loans, induced primarily by the Special Credit Restraint Program, were the major source of money's variability in 1980.

Conventional money-market models reflect the view that the monetary aggregates are determined primarily by the public's **demand** for money. The Judd-Scadding model reflects an alternative view — that the monetary aggregates are determined in the short-run primarily by the **supply** of money, which rises out of the behavior of banks and the public in credit markets (in the markets for bank loans and banks' liabilities like large certificates of deposit). As evidence, they note that banks' demand for reserves responds to its financial-market determinants with very short lags, consistent with the typical speed of adjustment in

credit markets, but not with the typical sluggishness of money demand. Also, bank loans had a potent influence on the monetary aggregates in 1980, as their model predicts. Finally, they note that the market for money is often characterized by disequilibrium in the short-run: money-supply shocks temporarily push the public off its short-run money-demand curve, which allows the money supply to exert a large short-run influence on the stock of money observed in the economy.

The Judd-Scadding results imply that policy makers should pay close attention to financial-market developments, especially when signs appear of a shift in the conventional money-demand function. They cite in particular the second quarter of 1980, when conventional models severely overpredicted the money stock. "Evidence of a downward shift in the money-demand relationship would imply that the money supply should be allowed to fall commensurately to avoid an overly expansionary monetary policy. On the other hand, our model explains the decline in money as supply shock, induced by the decline in bank loans that followed from the Special Credit Control Program of 1980. Such a conclusion implies that monetary-control efforts should be directed toward more rapid money-supply growth to avoid an overly contractionary policy."

Next, Rose McElhattan presents a small model of the U.S. economy for estimating the response of inflation and real output to a change in monetary policy. Measures obtained from the model's reduced-form equations provide estimates of the complete adjustment paths of inflation and real output to a monetary disturbance. In her model, prices continue to change until both the inflation rate and the level of real money balances reach their respective long-run values, while real output continues to adjust until it equals the level of potential output and is growing at the rate of potential output. Most other reduced-form models focus only upon the adjustment of rates of change in prices and output to a monetary disturbance. In contrast with these, McElhattan's model provides results which are consistent with the neutrality of money, which is one of the most generally accepted properties regarding economic behavior. It holds that changes in the money supply ultimately affect only nominal variables, such as prices and wages, leaving all real quantities, such as goods and services, unchanged.

In McElhattan's model, both inflation and real GNP respond quickly to a change in monetary policy, with the major stimulative or deflationary phase occurring within two years of the initial change. Her findings thus conflict with most of the published literature, which suggests that output and prices require about five years to respond to a change in money growth.

McElhattan thus provides an alternative to the viewpoint that it will take a long time to bring down the inflation rate, and that we risk an economic recession in the process. "Changes in monetary growth, at least since the mid-1960's, apparently have acted fairly rapidly upon inflation — and hence upon aggregate demand as well. Thus, since a monetary contraction is likely to bring inflation down faster than previously anticipated, less of the brunt of that contraction need be borne by real GNP, so that a major decline or loss of real income need not result when we adopt a policy which gradually reduces monetary growth."